

What is Claimed is:

1. A planet system workpiece support for a vacuum treatment apparatus, the support comprising:

a sun system (9, 9') that is rotatable with respect to the vacuum treatment apparatus, about a sun system axle (7) adapted to be coupled to a drive (1);

at least one planet system (17, 17') rotatable about a planet axle (11) and supported on the sun system (9, 9'), the planet system having a driving coupling (15, 13) for driving the planet system; and

at least one moon system (29, 31) supported on the planet system (17) and rotatable about a moon axle (19), with a driving connection to the sun system (7, 9, 9') and on which moon system a receiver for at least one workpiece is provided, wherein the driving connection is established, at least during operation, uninterruptedly between sun system and moon system.

2. A support as claimed in claim 1, wherein the driving connection is a forced driving connection.

3. A support as claimed in claim 1, wherein the driving connection between the moon system and the sun system comprises a transfer configuration (21; 60, 66, 68; 76, 80, 86) that is freely rotatable about the planet axle (11), engaging under transfer, the sun system (27), and the moon system (29).

4. A support as claimed in claim 1, wherein the driving connection comprises a transfer wheel (21) that is freely rotatable about the planet axle (11) and that engages a transfer wheel (29) on the moon system, the transfer wheel acting with a rotational detent (25) onto a stop on the sun system (9).

5. A support as claimed in claim 1, including a driving transmission comprising a transfer ring surface (72) disposed coaxially with the sun axle (7) on the sun system (9),

and on which a transfer wheel (29) carries out a rolling motion on the moon system (19).

6. A support as claimed in claim 1, including a planet wheel (17') that drives a transfer axle (78) which is releasably rotatably supported on the sun wheel (9), the transfer axle (78) being in rolling engagement with a transfer wheel (29) on the moon system via a further transfer wheel (80) as well as a ring (86) revolving about the planet axle (11).

7. A support as claimed in claim 1, wherein driving connection comprises at least one predetermined break point (51).

8. A support as claimed in claim 1, wherein the sun system axle (7) is guided through a stationary drive wheel (88) and a belt drive (90) wraps around a drive wheel (88) as well as planet drive wheels (13') provided on the planet axles.

9. In combination with the support as claimed in 1, a treatment chamber having detection means provided in order to detect discrepancies in motions of the support from nominal behavior for the support.